#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

### WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024687 Address: 333 Burma Road **Date Inspected:** 23-Jun-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

### **Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Assembly bay#14.

The following Non Destructive Testing (NDT) Inspection was carried out as per the ZPMC submitted Notification No.09579.

Magnetic Particle Testing (MT)

This QA randomly witnessed and performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a MT report for this date. The members are identified as OBG weld Components. Total number of welds MT witnessed: (80) and tested(40). The weld designation inspected was as follows:

- 1. SEG3020W-079.081.087.089.084.085
- 2. SEG3020AT-006,016,017,021,027,028,038,042,047,049,059,069,080,085,178,108,120,129,133,137,145,146, 187
- 3. SEG3020BC-046,048,022



## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

- 4. SEG3020BB-110~117,019,028,055,002,029,047,065,070,008,009,083,087,088,062,098
- 5. SEG3020AJ-017,465,020,021,123,099,102,109,114,157,088,153,066,471,069,070,148,073,143,463,478, 467~470.

During random in process visual inspection of OBG sub assembly members identified as vertical shear plates SA3446,49 and 50, this QA observed 4 holes on the connection plates measuring approximately 5~10 mm in dia. The connection plate members are identified as X5087D, G and H respectively. The connection plates designated as Seismic Performance Critical Material (SPCM) on the approved shop drawing. The "Y" locations measured from the west side end of the connection plates as shown on the picture below. The thickness of the connection plates is 14 mm. This QA marked the affected areas and informed ZPMC Quality Control (QC) CWI indentified as Mr. An Qing Xiang and QC identified as Mr. Sun tian liang and Mr. Zhulin of this issue. These QC personnel informed this QA that the holes would be corrected in a manner compliant with the contract documents. This QA Inspector also informed to American Bridge/Fluor QA Inspector identified as Mr. Zhang Qili and CT Lead QA Inspector of the issue. See attached photos for further details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.







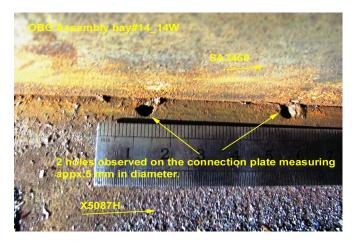


# WELDING INSPECTION REPORT

(Continued Page 3 of 3)









### **Summary of Conversations:**

No significant conversations were reported on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer